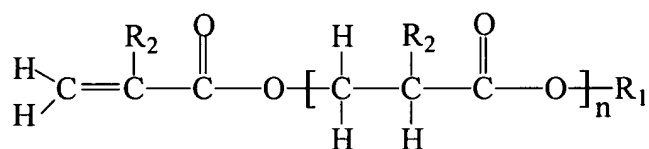


Abstract

The present invention relates to a process for cleaving a (meth)acrylic acid oligomer of
5 structure I



I

wherein

10 R_1 is a hydrogen atom or a C_1 to C_{10} alkyl groups,

R_2 is a hydrogen atom or a methyl group, and

n is a whole number within the range between 1 and 200,

optionally in the presence of a cleaving agent of the structure $\text{R}_3\text{-OH}$ or of the structure
15 $(\text{R}_4)_2\text{-N-H}$, whereby R_3 is a hydrogen atom, a C_1 to C_{12} alkyl group, or a $-\text{C}_x\text{H}_{2x}\text{-OH-}$
group, whereby x is a whole number within a range from 1 to 12, and R_4 is a hydrogen
atom or a C_1 to C_{12} alkyl group, with the proviso that not both R_4 groups are hydrogen
atoms, whereby the (meth)acrylic acid oligomers are heated with the cleaving agent to a
temperature of at least 50°C at a pressure of at least 1 bar. The present invention also
20 relates to the use of water, optionally with a protic compound as cleaving agent for
cleaving (meth)acrylic acid oligomers, a device for (meth)acrylic acid synthesis, the use of
this device for production of (meth)acrylic acid, as well as (meth)acrylic acid which has
been produced using this device.